

PMN No.: P-18-0116

ChemName: - Castor oil, reaction products with soybean oil

CASNo.: - 1186514-12-4

| Human Health Report Status: | |
|-----------------------------|------------------------------|
| X | HAZARD DRAFT- Pending Review |
| X | HAZARD REVIEWED |
| x | HAZARD FINAL |
| x | RISK DRAFT- pending review |
| x | RISK REVIEWED |
| x | RISK-FOCUS FINAL |
| | UPDATED DRAFT |
| | UPDATED FINAL |

SAT Date: - 03-06-2018

SAT Chair: - William Irwin

HH Hazard Assessor (A): - Sailesh Surapureddi

HH Hazard QC Reviewer (A): Susan Laessig

HH Hazard QC Date (A): - March 13, 2018

Focus Date: - March 22, 2018

HH Risk Assessor (B): - Keith Salazar

HH Risk QC Reviewer (B): - Keith Jacobs

HH Risk QC Date (B): - 3/22/18

1 HUMAN HEALTH SUMMARY

EPA estimated the human health hazard of this chemical substance based on its estimated physical/chemical properties, available PMN data, and/or by comparing it to structurally analogous chemical substances for which there is information on human health hazard, and/or other structural information. EPA concludes there is moderate concern for human health hazard for the chemical substance.

Based on the hazard determination and available qualitative risk information, EPA concludes that there is risk for the PMN substance. The risk estimates for this chemical are for the intended conditions of use. Other conditions of use and their risks were not evaluated.

Human Health Hazard:

- Absorption: Dermal is nil to poor, Lung is poor, GI is moderate based on p-chem properties-
- Concern for sensitization based on moderate response in the LLNA.

Human Health Risk:

- Potential risks were identified for workers for dermal sensitization based on submitted data. Risks may be mitigated by wearing impervious gloves.
- Potential risks were not identified for workers for sensitization via inhalation exposure since exposure was estimated to be negligible.
- Potential risks were not identified for the general population for sensitization via inhalation or oral exposure since inhalation exposure was below modeling thresholds and oral exposures were low.
- Risks were not assessed because consumer uses are not intended and exposures were not evaluated.

Potentially Useful Information:

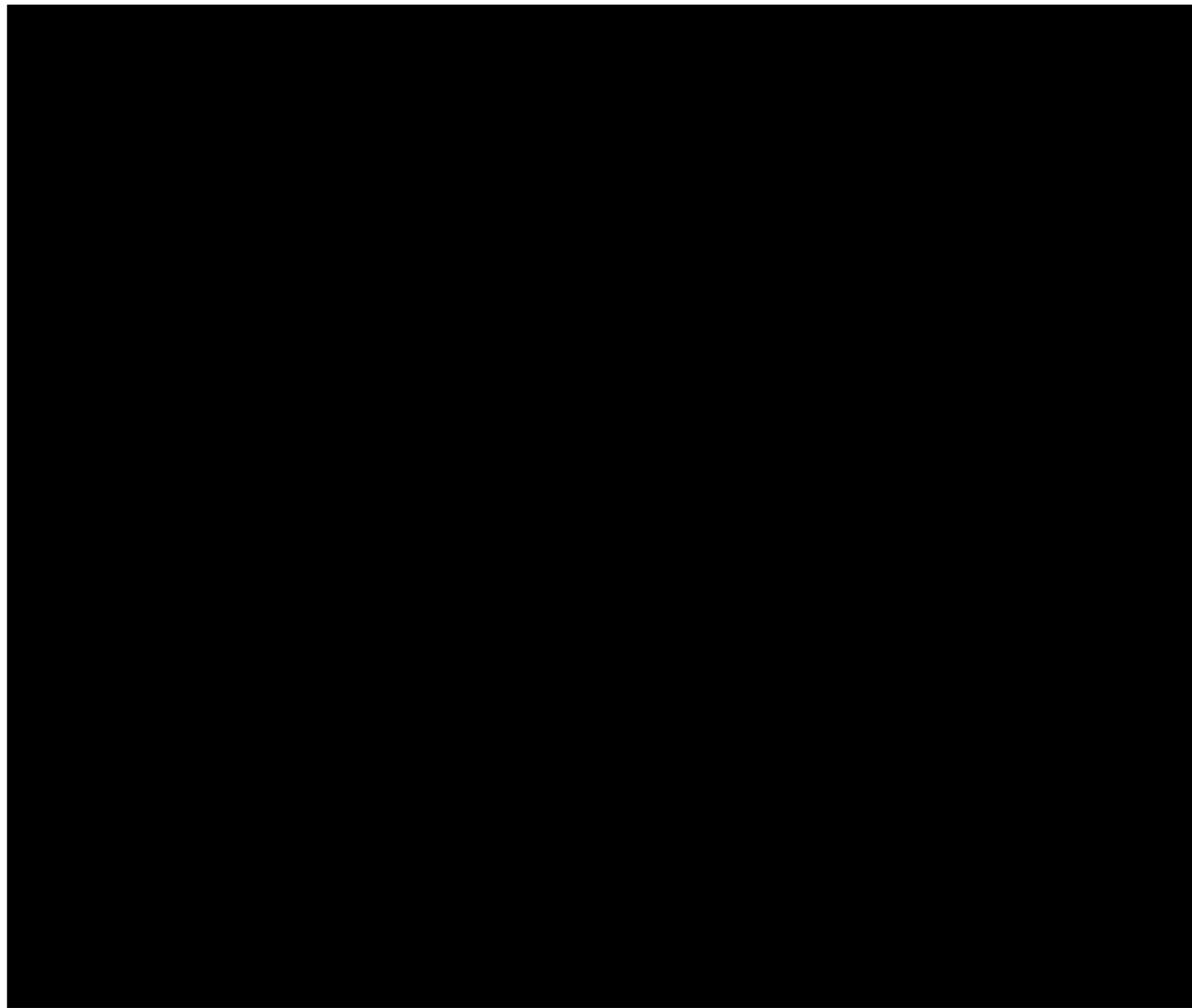
- None identified, sensitization testing has been submitted for the PMN to address these concerns.

2 HUMAN HEALTH HAZARD- PART A

2.1 Chemistry Summary:

CASRN: 1186514-12-4

Structure:



2.2 Human Health Category:

1. Chemical Category:
2. Chemical Category Health Concerns:
3. Category Testing Strategy:

2.3 SAT Summary:

2.3.1 PMN Health Rating:

1

2.3.2 SAT Key Words:

Sens-U

2.3.3 Absorption:

Absorption: Dermal is NIL to poor, Lung is poor, GI is moderate based on p-chem

2.3.4 SAT Health Summary:

Digestion and Metabolism of some of the PMN in the GI tract is expected. Concern for sensitization based moderate response in the LLNA.

2.3.5 PMN Data:

Acute oral: LD 50> 2000mg/kg/bw

Acute dermal: LD50: males and females > 2000 mg/kg/bw

Skin irritation/ corrosion: negative

Acute eye irritation: negative

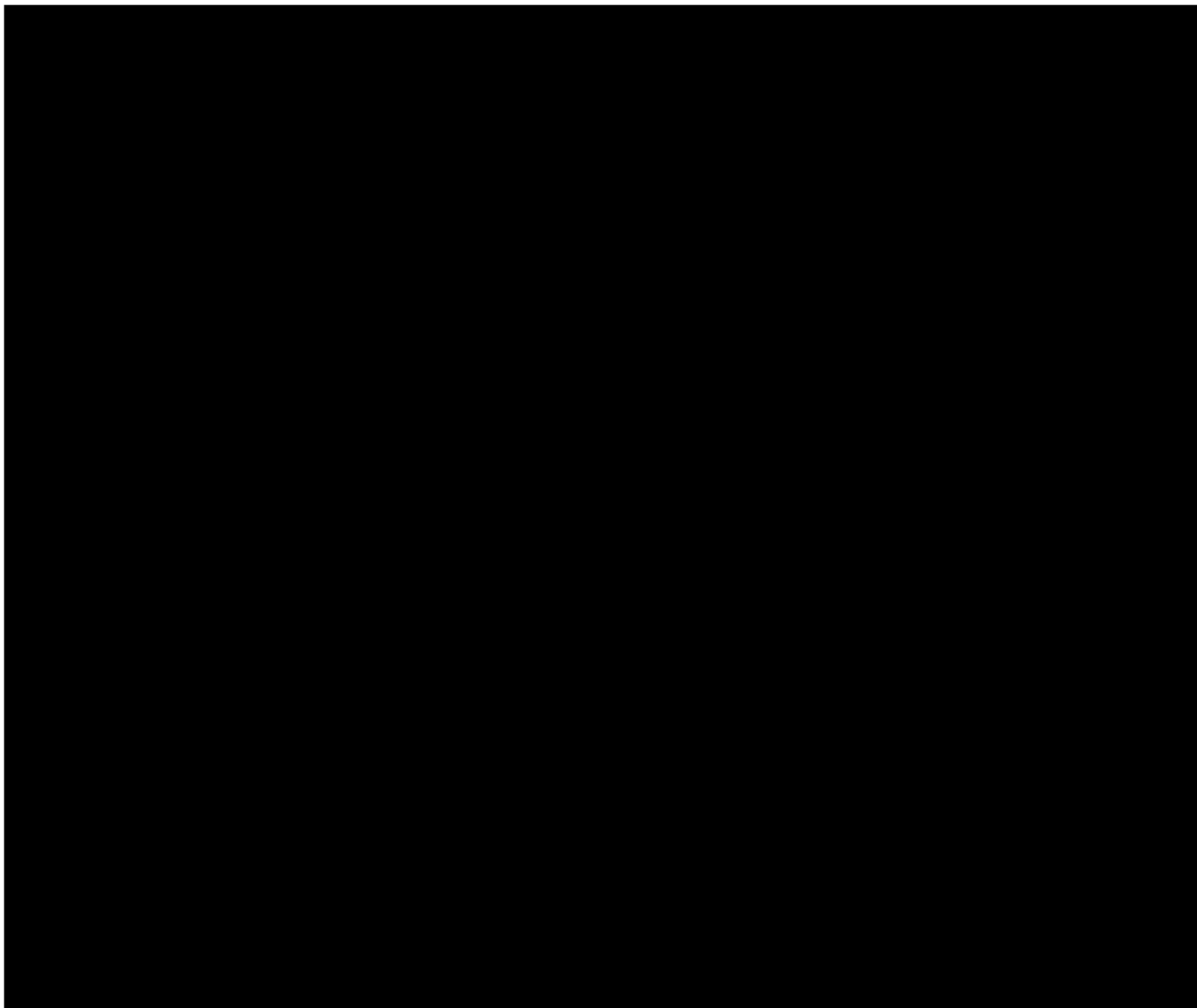
Mutagenicity +/- : negative

LLNA: moderately sensitizing potential EC1.4 value of 3.71%

Ames: negative

2.3.6 Analog Data:

Analogs:



2.3.7 Other Information: (SDS, structural alert or component of interest, basis, etc.)


2.3.8 Exposure Routes of Interest:

| Route of Interest | |
|-------------------|------------------------------------|
| X | Inhalation: |
| X | Dermal: |
| | Ingestion: No oral health concerns |

2.4 Point of Departure Selected and Basis

2.4.1 POD for Sensitization not available

1. POD type (NOAEL/LOAEL) - N/A

- 
2. **POD Chemical:** -
 3. **POD Route:** -
 4. **POD Endpoint:** -
 5. **POD Value:** -
 6. **POD Basis:** -
 7. **POD Benchmark MOE:** -
 8. **Reference:** -

3 HUMAN HEALTH RISK (PART B)

3.1 USES and EXPOSURES:

3.1.1 Uses

3.1.2 Worker Exposure

3.1.2.1 Inhalation

negligible (VP [REDACTED]); Mist generation is not expected during this operation.

3.1.2.2 Dermal

Potential Dose Rate: [REDACTED]

3.1.3 General Population Exposure:

Below modeling thresholds

3.1.3.1 Drinking Water:

Drinking water ingestion with ADR as high as [REDACTED]

3.1.3.2 Fish:

Fish ingestion with ADR as high as [REDACTED]

3.1.3.3 Air/Inhalation

Below modeling thresholds

3.1.4 Consumer Exposure

No identified consumer exposures

3.2 RISK CALCULATIONS:

No suitable POD available to calculate risk

3.2.1 Worker Calculations:

3.2.2 General Population Calculations:

3.2.3 Consumer Calculations:

Risks were not assessed because consumer exposures are not expected